

FOR PUBLICATION
UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

UNITED STATES OF AMERICA, <i>Plaintiff-Appellee,</i> v. KENT AOKI LEE, aka Kent Aoki aka Keun Do Kent Lee, <i>Defendant-Appellant.</i>

No. 01-10179
D.C. No.
CR-99-00560-SOM
OPINION

Appeal from the United States District Court
for the District of Hawaii
Susan Oki Mollway, District Judge, Presiding

Argued and Submitted
December 3, 2001—San Francisco, California

Filed July 12, 2002

Before: Melvin Brunetti, Andrew J. Kleinfeld and
Sidney R. Thomas, Circuit Judges.

Opinion by Judge Kleinfeld

COUNSEL

Shanlyn A. S. Park, Assistant Federal Public Defender, Honolulu, Hawaii, for the appellant.

Lawrence L. Tong, Assistant U.S. Attorney, Honolulu, Hawaii, for the appellee.

OPINION

KLEINFELD, Circuit Judge:

This case involves application of the special skills sentencing adjustment¹ to the use of a computer.

FACTS

The Honolulu Marathon Association has a web site at “www.honolulu-marathon.org.” During the relevant time, U.S. residents could use the site to register for the Honolulu Marathon and pay the registration fee online. Although many Japanese enter the race, the site did not permit online registration from Japan, but told Japanese entrants to register through an office in Japan.

The appellant, Kent Aoki Lee, lived in Honolulu, where he owned a video rental store. Lee came up with a scheme to sell marathon services to the marathon’s Japanese market. Lee owned a computer server, which he kept on the premises of an internet service provider with whom he had a dial-up internet account. He registered the domain name “www.honolulu-marathon.com” and created a site almost identical to the official Honolulu Marathon site by copying its files onto his server. While the official site did not permit online registration from Japan, Lee’s site contained an online registration form written in Japanese on which runners could enter personal information and credit card information. While the official registration fee was \$65, Lee’s site charged \$165. The extra \$100 over the registration fee covered a package including transportation to the race site, a meal, and a tour. Of course, none of this was legitimate, since Lee’s web site and registration package were not authorized by the Honolulu Marathon Association. Seventeen people tried to register through Lee’s site.

¹U.S.S.G. § 3B1.3 (2000).

Lee's scheme was uncovered and he pleaded guilty to one count of wire fraud² and one unrelated count of selling Viagra without a prescription.³ The main issue at sentencing was whether the district court could impose the special skills adjustment⁴ based on Lee's use of computer skills in creating his phony site.

Lee created his phony site by copying the legitimate site's files onto his computer server. Web sites consist of multiple web pages, which consist of individual computer files written in "hypertext markup language," or "HTML." The HTML files constituting a web site are located through a directory on a computer server. A computer directory is like a card in an old-fashioned library catalog, that tells where to find a book on a shelf. However a site's HTML files are referenced, they are linked together in the directory to create the whole web site. These links reflect the specific location of individual files within the server's structure of directories and subdirectories. The graphics on a web page are actually individual computer files to which that page's HTML file links, causing them to appear when the web page is displayed. An individual graphic file may be in the same directory as the HTML file to which it's linked, or in a subdirectory, or on another computer server altogether, and the link reflects that specific location. To copy a web site onto another computer server, it's not enough to copy the HTML file and the graphics for each web page. The copier must also recreate the directory structure of the original site or edit the links in the HTML files to reflect the different directory structure.

The creator of the genuine Honolulu Marathon site testified that Lee could have copied most of the site without knowing much about its directory structure, by using off-the-shelf software such as Microsoft's *FrontPage 98*, aided by a general

²18 U.S.C.S. § 1343 (Law Co-op. 1994 & Supp. 2002).

³21 U.S.C. §§ 331(k), 333(a)(1) (Law Co-op. 1997 & Supp. 2002).

⁴U.S.S.G. § 3B1.3 (2000).

circulation book such as *Front Page 98 for Dummies*.⁵ She also testified that a program like *FrontPage* would have written a line of code into the fake site's HTML files, indicating that it had been used. There weren't any such lines of code in the HTML files on Lee's site, suggesting that he didn't use this easy approach to copying the site. The creator of the authorized web site also testified that Lee could have pirated the site, much more slowly and laboriously, by using a text editor to copy it page by page (there were 130 individual web pages) and recreating the original site's directory structure so that each web page would properly display graphics and link to the other pages on the site. The legitimate site had two features, databases containing entrants' registration information and a list of past race results, that Lee could not copy onto his phony site, so he linked to those features on the genuine site so that they would appear to be part of his fake web site.

Lee's phony site contained one feature that was not on the genuine site, the online entry form that allowed residents of Japan to sign up for the marathon and provide a credit card account number to be billed for payment of the entry fee. The information entered on this form was processed using a "script," which is a program written in "common gateway interface," or "CGI," a programming language. The CGI script used by Lee's phony site didn't directly charge credit cards. It just stored the credit card data in a file on Lee's server, so that Lee could manually charge the cards later. (This database file was password protected, which the government's witness testified would require some knowledge of the server's operating system.) An excerpt of *FrontPage 98 for Dummies* that was read into the record told readers that to do CGI scripts, they should get help from someone experienced with computer programming. The official site's creator testified that writing a CGI form-handling script from scratch would have required significant programming expertise, but that modifying an existing script would have been much eas-

⁵Asha Dornfest, *FrontPage 98 for Dummies* (1997).

ier. She also testified that CGI scripts could be downloaded from the internet, and that web sites could be found that advised how to modify scripts to suit particular online forms.

The district court did not make a finding as to whether Lee copied the web site the easy way, such as by using *FrontPage 98* and *Front Page 98 for Dummies* (and perhaps deleting the software's identifying code using a text editor), or the hard way, using a text editor to copy the web site's HTML files page by page and figuring out the original site's directory structure. Nor did the court make a finding as to whether Lee downloaded the CGI script for his online form from the internet or made it himself from scratch, and if so, whether he had any expert assistance. Nor did the court make a finding as to whether Lee or his internet service provider maintained his server. The district court found that Lee "was skilled at accessing and manipulating computer systems" and imposed the special skills enhancement. The adjustment raised the guideline sentencing range from six to twelve months to ten to sixteen months. This increase deprived the district court of the sentencing option of imposing no imprisonment.⁶

Although Lee pleaded guilty, he reserved his right to appeal if the district court imposed the two-level special skill adjustment under U.S.S.G. § 3B1.3 (2000). Serving of the sentence awaits disposition of this appeal.

ANALYSIS

We said in another special skills adjustment case, *United States v. Petersen*,⁷ in dictum that we now adopt, that "[b]ecause a district court's determination that a defendant's particular abilities constitute a 'special skill' is essentially a matter of 'application of the guidelines to the facts,' . . . an abuse of discretion standard should guide our review," except

⁶U.S.S.G. § 5C1.1(c) (2000).

⁷*United States v. Petersen*, 98 F.3d 502 (9th Cir. 1996).

where “questions of law may arise in deciding whether a defendant used a special skill,” for which review is non-deferential.⁸

[1] The special skill adjustment provides for a two-level increase “[i]f the defendant abused a position of public or private trust, or used a special skill, in a manner that significantly facilitated the commission or concealment of the offense.”⁹ The abuse of a position of trust part of the adjustment applies to positions “characterized by professional or managerial discretion,” such as an attorney serving as a guardian who embezzles the client’s money, a bank executive’s fraudulent loan scheme, or a physician who sexually abuses a patient under the guise of an examination, but not to embezzlement by a bank teller or hotel clerk.¹⁰ The application note defining “special skill” says that it is “a skill not possessed by members of the general public and usually requiring substantial education, training, or licensing. Examples would include pilots, lawyers, doctors, accountants, chemists, and demolition experts.”¹¹

The district court based its imposition of the adjustment on our decision in *United States v. Petersen*.¹² The issue in the case at bar is whether Lee was more like the defendant in *Petersen*, or more like the defendant in another of our special skills cases, going the other way, *United States v. Green*.¹³ We conclude that the scope of discretion was not broad enough, in view of the limited findings, to treat this case like *Petersen*, and that it has to be put in the same class as *Green*, where we held that it was an abuse of discretion to impose the special

⁸*Id.* at 506 n.4.

⁹U.S.S.G. § 3B1.3 (2000).

¹⁰*Id.*, commentary, application note 1.

¹¹*Id.*, commentary, application note 3.

¹²98 F.3d 502 (9th Cir. 1996).

¹³962 F.2d 938 (9th Cir. 1992).

skills adjustment.¹⁴ This conclusion keeps our circuit's law consistent with that of the Sixth Circuit, which held in *United States v. Godman*¹⁵ that a level of computer expertise like Lee's did not justify imposition of the adjustment.¹⁶

The defendant in *United States v. Petersen*,¹⁷ which upheld the adjustment, was an expert hacker. He hacked into a national credit reporting agency's computer system and stole personal information that he used to order fraudulent credit cards.¹⁸ Then he hacked into a telephone company's computers, seized control of the telephone lines to a radio station, and arranged for himself and his confederates to be the callers who "won" two Porsches, \$40,000, and two trips to Hawaii in a radio call-in contest.¹⁹ Then he hacked into a national commercial lender's computer and got it to wire \$150,000 to him through two other banks.²⁰ This goes far beyond the computer skills of a clever high school youth or even many people who earn their livings as computer technicians and software engineers. The district court found that Petersen had "extraordinary knowledge of how computers work and how information is stored, how information is retrieved, and how the security of those systems can be preserved or invaded" and imposed the special skill adjustment.²¹ We affirmed, holding that "[d]espite Petersen's lack of formal training or licensing, his sophisticated computer skills reasonably can be equated to the skills possessed by pilots, lawyers, chemists, and demolition experts" for purposes of the special skills adjustment.²²

¹⁴*Id.* at 944-45.

¹⁵223 F.3d 320 (6th Cir. 2000).

¹⁶*See id.* at 322-23.

¹⁷98 F.3d 502 (9th Cir. 1996).

¹⁸*Id.* at 504.

¹⁹*Id.*

²⁰*Id.* at 505.

²¹*Id.* at 506.

²²*Id.* at 507.

[2] In a footnote, we went out of our way in *Petersen* to caution against routine application of the special skills enhancement to people with computer skills:

We do not intend to suggest that the ability to use or access computers would support a “special skill” adjustment under all circumstances. Computer skills cover a wide spectrum of ability. Only where a defendant’s computer skills are particularly sophisticated do they correspond to the Sentencing Commission’s examples of “special skills” — lawyer, doctor, pilot, etc. Courts should be particularly cautious in imposing special skills adjustments where substantial education, training, or licensing is not involved.²³

This footnote distinguishes *Petersen* from the case at bar, because Lee’s skills are not “particularly sophisticated” like Petersen’s, and unlike Petersen’s, don’t “correspond to the Sentencing Commission’s examples of ‘special skills’ — lawyer, doctor, pilot, etc.”²⁴ As we said in *Petersen*, “where substantial education, training or licensing is not involved,”²⁵ district courts must be especially cautious about imposing the adjustment.

Petersen distinguished *United States v. Green*,²⁶ where we reversed a special skills adjustment. Green took graphic design classes, learned from an instructor about paper that could be used for currency and about how it could be properly cut, ordered the special paper from a paper company (which tipped off the Secret Service), and took numerous photographs of currency, in the course of his counterfeiting scheme.²⁷

²³98 F.3d at 507 n.5 (citation omitted).

²⁴*Id.*

²⁵*Id.* at 507 n.5.

²⁶962 F.2d 938 (9th Cir. 1992).

²⁷*Id.* at 940.

We held that the printing and photographic skills were not so “special” as to permit the district court to impose the adjustment, saying it’s not enough that “the offense was difficult to commit or required a special skill to complete.”²⁸

In *United States v. Godman*,²⁹ the Sixth Circuit considered *Petersen* and quoted and followed our limiting footnote that we quote above.³⁰ Like Green, Godman was a counterfeiter, but Godman used an off-the-shelf professional page publishing program, Adobe PageMaker, with a scanner and a color inkjet printer.³¹ He’d learned PageMaker in a week, and had specialized computer experience preparing and repeatedly updating a color catalog.³² *Godman* held that the special skills adjustment could not properly be imposed, because Godman’s level of computer skills was not analogous to the level of skill possessed by the lawyers, doctors, pilots, etc. listed in the application note.³³ The Sixth Circuit held that the district court erred by stressing “overmuch” that Godman’s skills were not shared by the general public: “As the Application Note’s reference to the substantial training of such professionals as doctors and accountants suggests, emphasis is better placed on the difficulty with which a particular skill is acquired.”³⁴ The Sixth Circuit emphasized that “[s]uch skills are acquired through months (or years) of training, or the equivalent in self-tutelage.”³⁵

Our own cases have suggested factors that might make a skill “special” for purposes of this sentencing adjustment,

²⁸*Id.* at 944.

²⁹223 F.3d 320 (6th Cir. 2000).

³⁰*Id.* at 322-23.

³¹*Id.* at 322.

³²*Id.*

³³*Id.* at 323.

³⁴*Id.* at 322.

³⁵*Id.* at 323.

including a “public trust” rationale,³⁶ the level of sophistication,³⁷ and special educational or licensing requirements.³⁸ But this adjustment becomes open-ended to the point of meaninglessness if the phrase “special skill” is taken out of its context. There probably isn’t an occupation on earth that doesn’t involve some special skill not possessed by people outside it, and few of us who sit as judges would know how to do the work of most of the people who appear before us. So asking whether a skill is “special,” in the sense of not being common among the adult population, like driving a car, doesn’t get us very far toward deciding any cases.

And focusing much on the “specialness” of a skill is also hard to reconcile with our precedents. In *United States v. Harper*,³⁹ the defendant’s skills were very special indeed.⁴⁰ The robber had worked for both a bank and an ATM service company, and used the knowledge gained in both occupations to come up with a unique scheme to rob an ATM. At just the right time for the last service call of the day, when the ATM service office would empty out while the robbery was going on, she made a withdrawal from an ATM but didn’t take the money.⁴¹ She knew that leaving the cash would cause the ATM to shut itself down and generate a service call, which

³⁶See *United States v. Mainard*, 5 F.3d 404, 406 (9th Cir. 1993) (“[A]buse of a special skill is a special kind of abuse . . . of the trust that society reposes in a person when it enables him to acquire and have a skill that other members of society do not possess.”); but see *Petersen*, 98 F.3d at 507 (holding that “special societal investment” is not required to acquire a special skill).

³⁷See *United States v. Mendoza*, 78 F.3d 460, 465 (9th Cir. 1996) (holding that “the driving of an 18-wheeler without any reported mishap over several years is a skill well beyond that possessed by the general public”).

³⁸See *United States v. Harper*, 33 F.3d 1143, 1151 (9th Cir. 1994) (emphasizing that the special skills “usually require *substantial* education, training, or licensing”) (emphasis in original).

³⁹33 F.3d 1143 (9th Cir. 1994).

⁴⁰See *id.* at 1145.

⁴¹*Id.*

would put technicians on the site, and that they would open the machine so that she and her confederates could rob it.⁴² As skills go, Harper's were quite special, but we reversed the sentence because they weren't like those of "pilots, lawyers, doctors, accountants, chemists and demolition experts."⁴³

[3] Our cases are best reconciled, and this sentencing guideline is best read, as a two-part test. The test is not just whether the skill is "not possessed by members of the general public," but also, as a *sine qua non*, whether it is a skill "usually requiring substantial education, training, or licensing."⁴⁴ The application note's reference to "pilots, lawyers, doctors, accountants, chemists, and demolition experts"⁴⁵ requires reasoning by analogy, not just reference to dictionary definitions of "special" and "skill."⁴⁶ The special skill adjustment falls within the same guideline as an adjustment for people who abuse a "position of public or private trust, or used a special skill."⁴⁷ The application notes limit the position of trust adjustment to people with "professional or managerial discretion," analogous to attorneys who hold their clients' money in trust, physicians who treat patients, and "executives" (but not tellers) who manage a bank's loans.⁴⁸ The application note for special skills parallels the application note for positions of trust in its reference to people trained or employed at a high level.

⁴²*Id.*

⁴³*Id.* at 1151-52.

⁴⁴U.S.S.G. § 3B1.3, commentary, application note 3 (2000).

⁴⁵*Id.*

⁴⁶*See United States v. Petersen*, 98 F.3d 502, 507 (9th Cir. 1996) (holding that defendant's skills "reasonably can be equated" to those of professionals described in the guideline's application note); *United States v. Harper*, 33 F.3d 1143, 1151 (9th Cir. 1994) (holding that defendant's skills "cannot be reasonably equated" to those skills).

⁴⁷U.S.S.G. § 3B1.3 (2000).

⁴⁸*Id.*, commentary, application note 1.

[4] Lee was a video rental store operator who copied a web site. The findings don't establish whether he used off-the-shelf software or had to know more about programming, but it doesn't matter because either way, his level of sophistication was nothing like Petersen's. His skills were more like Green's or Godman's than Petersen's, and not in the class of "pilots, lawyers, doctors, accountants, chemists, and demolition experts."⁴⁹ Thus, under our precedents and the guideline's application notes, the district court's imposition of the special skills adjustment was not supported by the findings. We therefore reverse and remand for resentencing.

REVERSED AND REMANDED.

⁴⁹*Id.*, commentary, application note 3.